Arkansas (1 R), Louisiana (1 R), Texas (5 M, 7 R, 1 P, 1 M-R), New Mexico (2 M, 4 R, 2 P, 1 R-P), Arizona (2 P), Colorado (1 M, 10 R, 10 P, 1 M-R, 1 M-P, 1 R-P), Utah (2 R), Nevada (4 R), California (9 R, 1 P, 1 M-R).

ZODION ALBONOTATUM Townsend.

Zodion albonotatum Townsend, Jour. N. Y. Ent. Soc. V, 175, 1897. [Brownsville, Texas.]

This species is characterized by the presence of yellowish pollen on the distal abdominal segments, and by the absence of any rufous. The base of the abdomen may have some bluish pollen. The abdomen also lacks the oblique pattern of the markings of the two previous species.

Material examined:

Arizona: Tucson (19, melanistic phase); Colorado: Jim Creek, near Boulder—6,400' (2 &, pollinose phase).

## Notes on Hubbellia marginifera (Orthoptera: Tettigoniidae)

By John W. H. Rehn, Academy of Natural Sciences of Philadelphia

Upon receiving some additional material of the interesting and rare North American katydid, Hubbellia marginifera (Walker), studies were started to ascertain its relationship to other forms of the group. However, it has been impossible to complete this work at present, but it is thought advisable to publish such distributional and ecological information as has been gathered, and to note certain variation observed.

Four additional females of this species were collected two miles north of Myrtle Beach, Horry County, South Carolina, between July 22 and 26, 1940 by J. W. Cadbury III. The only other exact locality from which the species is known is "Camp Torreya," Township 2 N-R 7 W, Liberty County, Florida. A single female was taken at this locality in 1925 by T. H. Hubbell, and was described by Hebard 1 as the synonymous braestans. Uvarov 2 in 1940 pointed out the synonymy of

<sup>&</sup>lt;sup>1</sup> Trans. Amer. Entom. Soc., LIII, p. 3, [1927]. <sup>2</sup> Fla. Ent., XXIII, p. 11, [1940].

Hebard's name with the much older marginifera of Walker, which was said to have come from Africa (Mr. Vigors' collection).

The following description of the habitat where the additional material was collected has been obtained from the collector, and it appears to represent a different set of conditions from those observed at the "Camp Torreya" site. Two miles north of Myrtle Beach, and about 2000 feet from the ocean, is an area of dry oak barrens surrounded by large open grassy areas, this formerly pine forest which had been burned, also small open tracts with scrubby oak, a few fair sized oak trees, and some long leaf pine. Topsoil was sandy with occasional black muck patches. The specimens were collected at bait, on both oaks and pines, in the thicker portions of the woods, between 10 P.M. and 2 A.M. on moonlit nights. The temperature at this time varied between 75° and 85° F. The individuals were easily captured, making no real attempt to escape.

The following table shows the size variation shown by these individuals, the type of Hebard's *praestans*, and, as far as is possible, by Walker's type.

	Length of body	Length of pronotum	Posterior width of pronotum	Length of tegmina	Greatest tegminal width	Length of ovipositor	Length of anterior femur	Length of posterior femur	
July 22	30.6 mm.	8.0 mm.	5.2 mm.	27.0 mm.	8.0 mm.	30.3 mm.	9.5 mm.	25.5 mm.	
July 23		8.0	5.6	27.8	7.8	31.3	9.2	25.2	
July 24	31.8	7.8	4.9	27.0	7.6	29.0	8.9	24.8	
July 26	29.8	8.8	5.6	$28.8^{3}$	7.8	32.9	9.5	26.9	
type of									
praestans	30.5	8.3	4.7	25.3	6.7	31.3	9.7	26.0	
type of									
manaini fana	12 lines expansion of mines 90 lines								

With the four South Carolina specimens and the type of *praestans* before me I have noted the following significant variation; decided variation in the shape of the posterior margin of the pronotum, some variation in the width of the vertex, and slight variation in the degree of curvature of the ovipositor. In addition certain variation has been noted in coloration, but this seems clearly due to fading in certain individuals.

It is hoped that before long additional material of this species may be collected and that specimens of the unknown male sex may be found.

<sup>&</sup>lt;sup>3</sup> Spread specimen.